

Abstract

A method of controlling suspension performance in vehicles having hydropneumatic suspension devices between suspended masses and unsuspended masses and extremely variable axle load ratios, in particular on vehicles in which the front axle is subjected to a low, medium or high static load range, depending on the application of the vehicle, and the suspension device has double-action hydraulic cylinders between the suspended masses and unsuspended masses, their pressure spaces being connectable to a pump over pressure lines, a pressure-regulating valve being installed in the pressure line to the annular spaces, the pressure-regulating valve constantly correcting the pressure in the annular spaces to the pressure in the piston spaces in a predefined ratio, with the pressure (P_R) in the annular spaces (7, 8) of the spring cylinders (1, 2) being increased in the low load range (n) on the front axle.

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Key to figures

Figures 1, 2, 3:

Achsfederrate C = axle spring constant C

Zylinderdruck P_z = cylinder pressure P_z

5 Achslast A = axle load A

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